(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 April 2002 (18.04.2002)

PCT

(10) International Publication Number
WO 02/31691 A2

(51) International Patent Classification[7]: G06F 17/30

(21) International Application Number: PCT/GB01/04541

(22) International Filing Date: 12 October 2001 (12.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0024976.3 12 October 2000 (12.10.2000) GB

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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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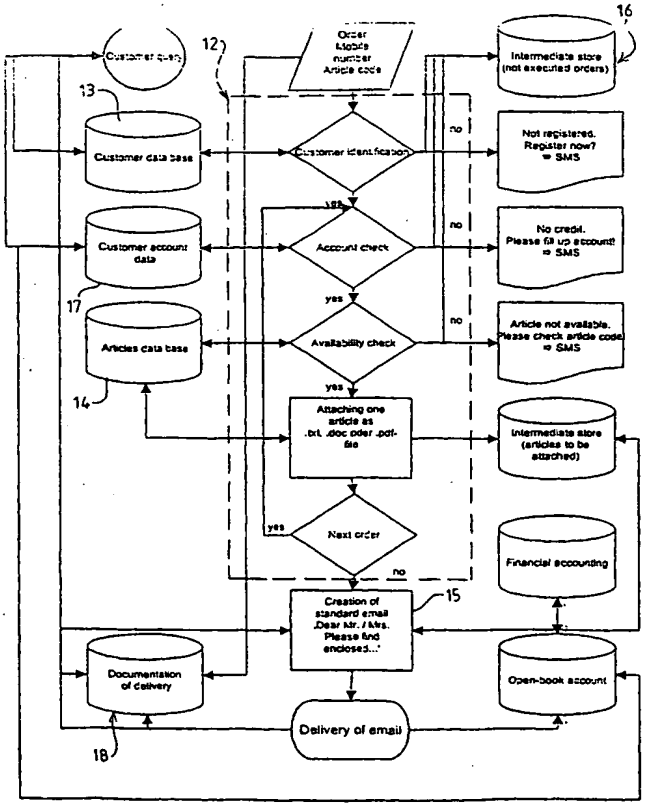
(54) Title: A METHOD OF OBTAINING INFORMATION FROM AN ELECTRONIC INFORMATION DATABASE



(57) Abstract: A method of obtaining information from an electronic information database, comprising: a) generating, in an input device, an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request, b) sending the request from the input device to a request processor, c) processing the request using the request processor, d) said processing comprising using the information specifier to extract the requested information from the electronic information database and using the source identifier to determine a delivery destination for the requested information, e) generating a response, the response including the requested information, and f) sending the response to the delivery destination such that the requested information is delivered thereto; characterised in that g) the input device is a mobile telecommunications device.

WO 02/31691 A2

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Title: A Method of Obtaining Information from an Electronic Information Database

Description of Invention

This invention relates to a method of obtaining information from an electronic information database and relates, in particular, to a method of obtaining more detailed information about news items, advertisements, reviews and the like, as are found in a variety of printed and electronic media.

For the sake of convenience, the term "news article" is used hereinafter to refer generally to such items.

Although information on many topics is available in an increasing number of different formats, information is increasingly being required in a digital format so that the recipient is readily able to store, handle, process, forward and archive it.

However, despite the increasing use of electronic media such as the Internet to collate, sort and distribute information, the printed page is still the medium by which most readers absorb and assimilate information, meaning that there exists a real divide between printed and electronic information, from the reader's perspective.

From a publisher's point of view, there exists a desire to make more use of the vast quantity of information which is routinely gathered during the preparation of a particular story which, due to ever increasing space constraints, is rarely passed on in its entirety to the reader.

In an attempt to bridge the divide which exists between printed information and its electronic counter-part, it is known, for example, to provide an Internet Web address (URL) below a printed article or advertisement, for example, so that a reader may later access the Website concerned in an attempt to glean further (electronic) information on the story or product/service concerned.

Some newspapers facilitate the link to such an associated Website in a different manner, by printing a two dimensional bar code below the article concerned, which, through the use of a PC scanner pen, enables a reader to access the Website in a more expeditious - and doubtless reliable - manner.

Even more adventurous is a system based upon watermark technologies in which a specifically configured watermark is embedded within a particular article, with an associated Webcam then being able to view the watermark, decipher the watermark's specific configuration, and connect a linked PC to a corresponding Website, from where the user is able to obtain more detailed information on the article concerned.

It is also possible, of course, to access electronic versions of printed publications, and to subscribe to a variety of services whereby news items, sports results, share prices and the like are sent automatically to a predetermined destination such as a fax number or e-mail address.

However, until now, no reliable method has been proposed by which it is possible to obtain additional information - in an electronic, and hence easily manageable, form - on a variety of different subject matters, in a reliable and speedy manner.

Broadly speaking, therefore, it is an object of the present invention to provide an improved method of obtaining information from an electronic information database which addresses this drawback. It is also an object of the present invention to provide an improved method of providing information from an electronic information database which addresses similar issues.

According to a first aspect of the present invention, I provide a method of obtaining information from an electronic information database, comprising:

a) generating, in an input device, an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) sending the request from the input device to a request processor,

c) processing the request using the request processor,

d) said processing comprising using the information specifier to extract the requested information from the electronic information database and using the source identifier to determine a delivery destination for the requested information,

e) generating a response, the response including the requested information, and

f) sending the response to the delivery destination such that the requested information is delivered thereto; characterised in that

g) the input device is a mobile telecommunications device.

Preferably, the input device is a GSM (Global System for Mobile Communications) telephone, such that the information request may be sent using the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM network. As information sent using the SMS or WAP of the GSM network is always accompanied by details of the originating GSM telephone's number or WAP browser address, the source identifier may conveniently be provided by the telephone number or WAP browser address of the GSM telephone.

It will be appreciated from this that the source identifier is therefore sent as an inevitable consequence of the generation and sending of the SMS or WAP communication, meaning that a user of the method need not be concerned with identifying him/herself to the request processor, greatly increasing the speed with which the electronic information can be obtained. Moreover, this reduces - and potentially eliminates - any communication errors which could lead to a user being misidentified, with the extracted information thus being sent to an incorrect delivery destination.

The method preferably further comprises comparing the source identifier with the content of a user database such that an advisory message may be sent

back to the GSM telephone in the event that the user database does not contain the source identifier.

Thus, prior to use of the invented method, users may register their details - including their GSM telephone number - with a provider of the invented method, with these details being stored in the user database for later comparison with the incoming source identifier.

Conveniently, the advisory message is sent back to the GSM telephone using the SMS or WAP of the GSM network.

The user database preferably contains a plurality of source identifiers and a plurality of corresponding delivery destinations, pre-selected by the respective users.

Users of the invented method are thus able to elect one of several delivery methods - and hence delivery destinations, in accordance with their particular requirements.

In this way, the response may be sent to the delivery destination using the SMS or WAP of the GSM network.

Alternatively, the response may be sent as an e-mail message, with the requested information being sent as a file attachment to the e-mail message.

It will of course be appreciated that a given response could conceivably be sent to two or more different delivery destinations, if so pre-selected by a user.

In the event that the comparison reveals that the user database does not contain the source identifier, the information request may be sent to a holding database for storage.

The holding database may store the information request for a limited time period only. If, in response to the advisory message, a user's details are entered into the user database, the holding database may release the stored information request, conveniently then passing the information request to an information extraction server which processes the information request.

The information extraction server is preferably able to access a plurality of electronic information databases, with part of the source identifier being used by the information extraction server to determine which of said plurality of electronic information databases should be accessed, for extraction of the requested information.

The information specifier may be input by a user in the form of an alphabetic, numeric or alphanumeric string.

A plurality of information specifiers may be sent simultaneously to the request processor, with each information specifier conveniently being separated by a "break" character which is recognisable by the request processor.

Preferably, a plurality of strings are made available to a user, the strings being displayed below or adjacent printed news articles and the like, such that the user is able to obtain more information relating to - or an electronic copy of - said news article by inputting said string into the input device, and sending the generated information request to the request processor.

The information extraction server may compare the information specifier with the content of the electronic information databases to be accessed, such that an error message may be sent back to the GSM telephone in the event that the electronic information databases do not contain the information specifier.

In the event that the electronic information databases do not contain the information specifier, the information request may be sent to the holding database for storage.

In the event that a correct information specifier is then sent by the user, in response to the error message, the holding database may release the stored information request, passing it to the information extraction server.

According to a second aspect of the present invention, I provide a method of obtaining supplemental information from an electronic information database, comprising:

a) generating, in an input device, a supplemental information request, the request including a supplemental information specifier, to specify the requested supplemental information and a source identifier to identify the source of the request, the supplemental information specifier being input by a user in the form of an alphabetic, numeric or alphanumeric string,

b) sending the request from the input device to a request processor,

c) processing the request using the request processor,

d) said processing comprising using the supplemental information specifier to extract the requested supplemental information from the electronic information database and using the source identifier to determine a delivery destination for the requested supplemental information,

e) generating a response, the response including the requested supplemental information, and

f) sending the response to the delivery destination such that the requested supplemental information is delivered thereto; characterised in that

g) the input device is a mobile communications device, and in that

h) the string is displayed below or adjacent a news article or the like, such that the user is able to obtain supplemental information relating to said news article or the like by inputting the string into the input device, and sending the generated request to the request processor.

Preferably, the request is sent using the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

The invention, in its second aspect, may comprise one or more of the features of the first aspect of the invention.

According to a third aspect of the present invention, I provide apparatus for obtaining information from an electronic information database, comprising

a) an input device adapted to generate an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) means to send the request from the input device to a request processor,

c) means to process the request using the request processor, the request processor being adapted to use the information specifier to extract the requested information from the electronic database and to use the source identifier to determine a delivery destination for the requested information,

d) means to generate a response, the response including the requested information, and

e) means to send the response to the delivery destination such that the requested information is delivered thereto; characterised in that

f) the input device is a mobile telecommunications device.

Preferably, the means to send the information request comprises the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

The various features of the third aspect of the present invention may operate or be adapted to operate substantially in accordance with one or more of the features of the first and/or second aspects of the present invention.

According to a fourth aspect of the present invention, I provide apparatus for obtaining supplemental information from an electronic information database, comprising

a) an input device adapted to generate a supplemental information request, the request including a supplemental information specifier to specify the requested supplemental information and a source identifier to identify the source of the request, the supplemental information specifier being

input by a user in the form of an alphabetic, numeric or alphanumeric string,

b) means to send the request from the input device to a request processor,

c) means to process the request using the request processor, the request processor being adapted to use the supplemental information specifier to extract the requested supplemental information from the electronic information database and to use the source identifier to determine a delivery destination for the requested supplemental information,

d) means to generate a response, the response including the requested supplemental information, and

e) means to send the response to the delivery destination such that the requested supplemental information is delivered thereto; characterised in that

f) the input device is a mobile telecommunications device.

Preferably, the means to send the supplemental information request comprises the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

The various features of the fourth aspect of the present invention may operate or be adapted to operate substantially in accordance with one or more of the features of the first, second and/or third aspects of the present invention.

In accordance with a fifth aspect of the present invention, I provide a method of providing information from an electronic information database, comprising:

a) receiving an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) processing the request, said processing comprising using the information specifier to extract the requested information from the electronic

information database and using the source identifier to determine a delivery destination for the requested information,

c) generating a response, the response including the requested information, and

d) sending the response to the delivery destination such that the requested information is delivered thereto.

The information specifier and source identifier may be received substantially simultaneously or using a single transmission. The transmission may be a wireless transmission, conveniently made using a mobile telecommunications device. Preferably, the transmission is a SMS transmission.

The invention, in its fifth aspect, may comprise one or more of the features of the first four aspects of the invention.

In accordance with a sixth aspect of the present invention, I provide apparatus for providing information from an electronic information database, comprising:

a) a receiving element operative to receive an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) a request processor adapted to use the information specifier to extract the requested information from the electronic database and to use the source identifier to determine a delivery destination for the requested information,

c) means to generate a response, the response including the requested information and

d) means to send the response to the delivery destination such that the requested information is delivered thereto.

The receiving element may be operative to receive signals originating in a mobile telecommunications device. Conveniently, the receiving element is operative to receive SMS transmissions.

The invention, in its sixth aspect, may comprise one or more of the features set out in the preceding paragraphs.

The invention will now be described in greater detail, but by way of example only, by reference to the accompanying schematic drawings, of which

Figure 1 is a schematic overview of the invented method,

Figure 2 is a more detailed schematic illustration of the method of Figure 1,

Figure 3 is a still more detailed schematic illustration of the methods shown in Figures 1 and 2, showing, in particular, how a multiple information request is dealt with.

Referring first to Figure 1, the invented method of obtaining information from an electronic information database is put into practice in the following manner.

The sequence of events is initiated by a user placing an order for the information concerned using a SMS or WAP enabled GSM telephone. From the user's perspective, all that is required is that an article code (i.e. information specifier) is input into the GSM telephone, for subsequent sending, as a SMS/WAP communication, to a predetermined SMS/WAP message centre, at which is provided a request processor 12, conveniently in the form of a server.

An inherent feature of SMS/WAP communications which originates from a GSM enabled telephone is that the telephone number of the GSM telephone is always transmitted with the communication, so that, for example, messages advising of delivery (or failure) of an outgoing SMS message can be returned to the sender. Also, the inclusion of the GSM telephone number enables mobile communications companies to identify the source of the

SMS/WAP communications, thus enabling an appropriate charge to be made to the user.

The information specifier is input into the GSM telephone in the form of an alphanumeric string of characters, with the string forming the "message" content of the SMS/WAP communication. The configuration of the alphanumeric string is determined by the user, in accordance with the specific information which is required, as explained in more detail in relation to Figure 2.

Identification of the user (or customer, if a financial transaction is involved) is performed by the request processor 12, which compares the incoming GSM telephone number with the content of a user/customer database 13, in which users'/customers' details have previously been stored. Where the comparison reveals that the GSM telephone number is not contained within the user/customer database 13, an appropriate advisory message is sent back to the GSM telephone, as explained in more detail in relation to Figure 3.

The request processor 12 then passes the information request to an information extraction server which compares the information specifier (article code) with the content of one or more electronic information/articles databases 14, and extracts the requested information therefrom, with the information then being passed to a communication server 15 for the generation of a response.

The response is sent to a delivery destination which is determined by the content of the user/customer database 13. Specifically, as users'/customers' details have previously been entered into the user/customer database 13, with these details including a preferred delivery destination (e.g. a specified e-mail address, Internet Website, or SMS/WAP GSM telephone number) the communication server 15 generates a response, with the address field of the response being determined by the appropriate predetermined information obtained from the user/customer database 13.

In Figure 1, the response is shown to constitute an e-mail, with the requested information (e.g. an in-depth news article) being attached to the e-mail as a file attachment. Although it is envisaged that a particularly convenient format for the file attachments will be the .pdf format, it will be appreciated that a variety of different formats is envisaged, with a preferred format being pre-selected by the user, the pre-selection being stored in the user database 13. The user database 13 would then interact with the article database 14 and/or the communication server 15 to ensure that the attached file is in the correct format as specified by the user.

Subsequent to the generation of the e-mail and file attachment, the response is sent to the required delivery destination, with the overall process typically taking no longer than a maximum of 30 seconds or so, calculated from the time at which the originating SMS/WAP communication is sent by the user to the request processor 12.

Looking next at Figure 2, this shows in more detail the way in which the process is put into effect.

A user, on reading a news article (for example), wishes to obtain further, more detailed, information on the general subject matter of the news article concerned. As shown generally at 10, the article is provided, near its end, with an alphabetic, numeric, or alphanumeric string generally indicated at 11 which the user enters into a SMS/WAP enabled GSM telephone, with the string constituting the body of the SMS/WAP communication.

The SMS/WAP communication is sent, using the GSM network, to a SMS/WAP message centre, at which is located (or, to which is connected) a request processor server generally indicated in dotted outline at 12. The request processor 12 receives the incoming SMS/WAP message and identifies the GSM telephone number of the GSM telephone from which the message originates. This number is then compared by the request processor 12 with the content of a user/customer database 13, so that further details of the user may be obtained,

on the assumption that the user's details have previously been registered with an appropriate service provider. The article code 11 acts as an information specifier, with the request processor 12 comparing the information specifier with the content of an electronic information/articles database 14, so that the requested information may be extracted and passed to a communication server generally indicated at 15.

The communication server arranges for a response to be sent to a delivery destination which is determined in accordance with the user's preferences, as contained within the user database 13. The user database 13 also includes data on the user's preferred delivery format, meaning that (amongst others), a .pdf, .doc, or .txt version of the electronic information may be extracted from the article database 14, as required. The communication server (in this example) then generates an e-mail message with the requested information being attached thereto as a file attachment, and the response is then sent to the predetermined delivery destination.

As the information is thus received by the user in electronic form, the user is able to store, classify, and manipulate the information very easily, such that it may then be forwarded on an electronic basis to other interested parties.

Referring next to Figure 3, this illustrates in more detail the process outlined in relation to Figures 1 and 2.

In particular, it can be seen that the request processor 12, in performing a user/customer identification step, compares the incoming GSM mobile number with the content of the customer database 13. If no match is found (i.e. the incoming mobile number is not found to be contained within the customer database 13) an advisory message to that effect is sent back to the originating GSM telephone. The advisory message, for example, may draw the mismatch to the user's attention, and suggest, if the user has not already done so, that the user registers his/her details with the relevant service provider, conveniently by giving the user the URL of an Internet registration page. At the same time, the

non-executed order is sent to a holding database 16 for storage for a limited time period. If, during this period, the user's details are entered into the customer database 13, the stored request is then released back to the request processor 12 so that a subsequent financial account check may be made.

The financial account check involves a comparison, in a customer account database 17, of the source identifier with users' financial details stored in the database 17. This database, which may also be accessed independently by a customer, to check the state of an account, is compared with the source identifier (GSM mobile number) so that the content of the customer's account may be assessed. If insufficient funds are available, an appropriate advisory message is sent back to the originating GSM telephone as a SMS/WAP communication, allowing the user to top up the account, as necessary. Again, where such an advisory message is sent, the information request is stored in the holding database 16 for later retrieval in the event that the account deficiency is remedied. Where the account is found to be sufficiently credit worthy, or where a sufficient top up has later been effected, the information request is then subjected to an information availability check, in which the information specifier (the article string) is compared with the content of the article database 14. If a mis-match is found, suggesting that an incorrect article string has been entered by the user, an appropriate error message is sent back to the originating GSM phone as a SMS/WAP communication, requesting that the user checks the article string, for re-submission, if appropriate. Again, where such an error message is sent, the information request is passed to the holding database 16 for later retrieval, if appropriate. Thus, the process, from the point at which the incoming SMS/WAP communication is received from the input device, includes three verification checks, prior to the generation of the desired response.

As an alternative, an appropriate charge (a "micropayment") could be made to the user's mobile telephone bill.

The process also allows for the execution of multiple information requests, which are effected by the user by inputting a succession of article strings, separated, for example, by a particular alphanumeric character or other such symbol, which is recognisable by the request processor 12. Where the request processor 12 identifies such a "break" character, this is interpreted as an instruction to repeat the second and third verification steps (financial and document availability) so that the additional information may be extracted from the article database 14. Once the order (or orders) has/have been completed, the information is attached to a standard e-mail, generated by a communication server 15, with the format of the attached information having been pre-selected by the user during the registration procedure.

The e-mail is then dispatched to the predetermined delivery destination, with it also being possible at that point to provide a printed or electronic delivery summary, for dispatch to the user, or for storage in a delivery documentation database 18.

Whilst the specific example referred to in relation to Figure 3 shows the inclusion of a financial aspect, in that the user pays for each retrieved item of information through an account debiting procedure, it will be appreciated that there is in fact no necessity whatsoever for any charge to be levied as a result of the information supply. Thus, whilst a financial element could well be attractive to potential providers of the invented method, and whilst the invention may thus provide an improved business method, the technical principle underlying the invention - the realisation that the use of SMS/WAP communications sent using the GSM network enables an extremely rapid information retrieval system to be achieved - does not of course rely in any way on any financial or economic factors.

In the present specification "comprise" means "includes or consists of" and "comprising" means "including or consisting of".

The features disclosed in the foregoing description, or the following claims, or the accompanying drawings, expressed in their specific forms or in terms of a means for performing the disclosed function, or a method or process for attaining the disclosed result, as appropriate, may, separately, or in any combination of such features, be utilised for realising the invention in diverse forms thereof.

CLAIMS:

1. A method of obtaining information from an electronic information database, comprising:

a) generating, in an input device, an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) sending the request from the input device to a request processor,

c) processing the request using the request processor,

d) said processing comprising using the information specifier to extract the requested information from the electronic information database and using the source identifier to determine a delivery destination for the requested information,

e) generating a response, the response including the requested information, and

f) sending the response to the delivery destination such that the requested information is delivered thereto; characterised in that

g) the input device is a mobile telecommunications device.

2. A method according to claim 1 wherein the input device is a GSM telephone and wherein the source identifier is provided by the telephone number or WAP browser address of the GSM telephone.

3. A method according to claim 2 further comprising comparing the source identifier with the content of a user database such that an advisory message may be sent back to the GSM telephone in the event that the user database does not contain the source identifier.

4. A method according to claim 3 wherein the advisory message is sent using the SMS or WAP of the GSM network.

5. A method according to claim 2, claim 3 or claim 4 wherein the user database contains a plurality of source identifiers and a plurality of corresponding delivery destinations, pre-selected by the respective users.

6. A method according to any one of the preceding claims wherein the response is sent to the delivery destination using the SMS or WAP of the GSM network.

7. A method according to any one of claims 1 to 5 wherein the response is sent as an e-mail message with the requested information being sent as an attachment to the e-mail message.

8. A method according to any one of claims 3 to 7 wherein, in the event that the user database does not contain the source identifier, the information request is sent to a holding database for storage.

9. A method according to claim 8 wherein the holding database stores the information request for a limited time period only.

10. A method according to claim 8 or claim 9 wherein the holding database releases the stored information request in the event that a user's details are entered into the user database in response to the advisory message.

11. A method according to claim 10 wherein the information request is then passed to an information extraction server which processes the information request.

12. A method according to claim 11 wherein the information extraction server is able to access a plurality of electronic information databases, part of the source identifier being used by the information extraction server to determine which of said plurality of electronic information databases should be accessed, for extraction of the requested information.

13. A method according to any one of the preceding claims wherein the information specifier is input by a user in the form of an alphabetic, numeric or alphanumeric string.

14. A method according to any one of the preceding claims wherein a plurality of information specifiers are sent simultaneously.

15. A method according to claim 14 wherein each information specifier is separated by a "break" character, which is recognisable by the request processor.

16. A method according to claim 13, claim 14 or claim 15 wherein a plurality of strings is made available to a user, the strings being displayed below or adjacent printed news articles and the like, such that the user is able to obtain more information relating to said news article or the like by inputting said string into the input device, and sending the generated information request to the request processor.

17. A method according to any one of claims 11 to 16 wherein the information extraction server compares the information specifier with the content of the electronic information database to be accessed, such that an error

message may be sent back to the GSM telephone in the event that the electronic information database does not contain the information specifier.

18. A method according to claim 17 wherein, in the event that the electronic information database does not contain the information specifier, the information request is sent to the holding database for storage.

19. A method according to claim 18 wherein, in the event that a correct information specifier is then sent by the user in response to the error message, the holding database releases the stored information request.

20. A method of obtaining information from an electronic information database, substantially as hereinbefore described and/or as shown in the accompanying drawings.

21. A method of obtaining supplemental information from an electronic information database, comprising:

a) generating, in an input device, a supplemental information request, the request including a supplemental information specifier, to specify the requested supplemental information and a source identifier to identify the source of the request, the supplemental information specifier being input by a user in the form of an alphabetic, numeric or alphanumeric string,

b) sending the request from the input device to a request processor,

c) processing the request using the request processor,

d) said processing comprising using the supplemental information specifier to extract the requested supplemental information from the electronic information database and using the source identifier to determine a delivery destination for the requested supplemental information,

e) generating a response, the response including the requested supplemental information, and

f) sending the response to the delivery destination such that the requested supplemental information is delivered thereto; characterised in that

g) the input device is a mobile communications device, and in that

h) the string is displayed below or adjacent a news article or the like, such that the user is able to obtain supplemental information relating to said news article or the like by inputting the string into the input device, and sending the generated request to the request processor.

22. A method according to claim 21 wherein the means to send the information request comprises the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

23. A method of obtaining supplemental information from an electronic information database, substantially as hereinbefore described and/or as shown in the accompanying drawings.

24. Apparatus for obtaining information from an electronic information database, comprising

a) an input device adapted to generate an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) means to send the request from the input device to a request processor,

c) means to process the request using the request processor, the request processor being adapted to use the information specifier to extract the requested information from the electronic database and to use the source

identifier to determine a delivery destination for the requested information,

d) means to generate a response, the response including the requested information, and

e) means to send the response to the delivery destination such that the requested information is delivered thereto; characterised in that

f) the input device is a mobile telecommunications device.

25. Apparatus for obtaining information from an electronic information database according to claim 24, wherein the means to send the information request comprises the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

26. Apparatus for obtaining information from an electronic information database substantially as hereinbefore described and/or as shown in the accompanying drawings.

27. Apparatus for obtaining supplemental information from an electronic information database, comprising

a) an input device adapted to generate a supplemental information request, the request including a supplemental information specifier to specify the requested supplemental information and a source identifier to identify the source of the request, the supplemental information specifier being input by a user in the form of an alphabetic, numeric or alphanumeric string,

b) means to send the request from the input device to a request processor,

c) means to process the request using the request processor, the request processor being adapted to use the supplemental information specifier to

extract the requested supplemental information from the electronic information database and to use the source identifier to determine a delivery destination for the requested supplemental information,

d) means to generate a response, the response including the requested supplemental information, and

e) means to send the response to the delivery destination such that the requested supplemental information is delivered thereto; characterised in that

f) the input device is a mobile telecommunications device.

28. Apparatus for obtaining supplemental information according to claim 27 wherein the means to send the supplemental information request comprises the SMS (Short Message Service) or the WAP (Wireless Application Protocol) of the GSM (Global System for Mobile Communications) network.

29. Apparatus for obtaining supplemental information from an electronic information database substantially as hereinbefore described and/or as shown in the accompanying drawings.

30. A method of providing information from an electronic information database, comprising:

a) receiving an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request,

b) processing the request, said processing comprising using the information specifier to extract the requested information from the electronic information database and using the source identifier to determine a delivery destination for the requested information,

c) generating a response, the response including the requested information, and

d) sending the response to the delivery destination such that the requested information is delivered thereto.

31. A method according to claim 30 wherein the information specifier and source identifier are received substantially simultaneously or using a single transmission.

32. A method according to claim 30 or claim 31 wherein the information specifier and source identifier are received using a wireless transmission.

33. A method according to claim 32 wherein the transmission is made using a mobile telecommunications device.

34. A method according to claim 31, claim 32 or claim 33 wherein the transmission is a SMS transmission.

35. A method according to any one of claims 30 to 34 further comprising the features of one or more of claims 1 to 29.

36. A method of providing information from an electronic information database, substantially as hereinbefore described and/or as shown in the accompanying drawings.

37. Apparatus for providing information from an electronic information database, comprising:

a) a receiving element operative to receive an information request, the information request including an information specifier to specify the

requested information and a source identifier to identify the source of the request,

b) a request processor adapted to use the information specifier to extract the requested information from the electronic database and to use the source identifier to determine a delivery destination for the requested information,

c) means to generate a response, the response including the requested information and

d) means to send the response to the delivery destination such that the requested information is delivered thereto.

38. Apparatus according to claim 37, wherein the receiving element is operative to receive signals originating in a mobile telecommunications device.

39. Apparatus according to claim 37 or claim 38 wherein the receiving element is operative to receive SMS transmissions.

40. Apparatus according to claim 37, claim 38 or claim 39 further comprising the features of one or more of claims 1 to 36.

41. Apparatus for providing information from an electronic information database substantially as hereinbefore described and/or as shown in the accompanying drawings.

42. Any novel feature or novel combination of features described herein and/or in the accompanying drawings.

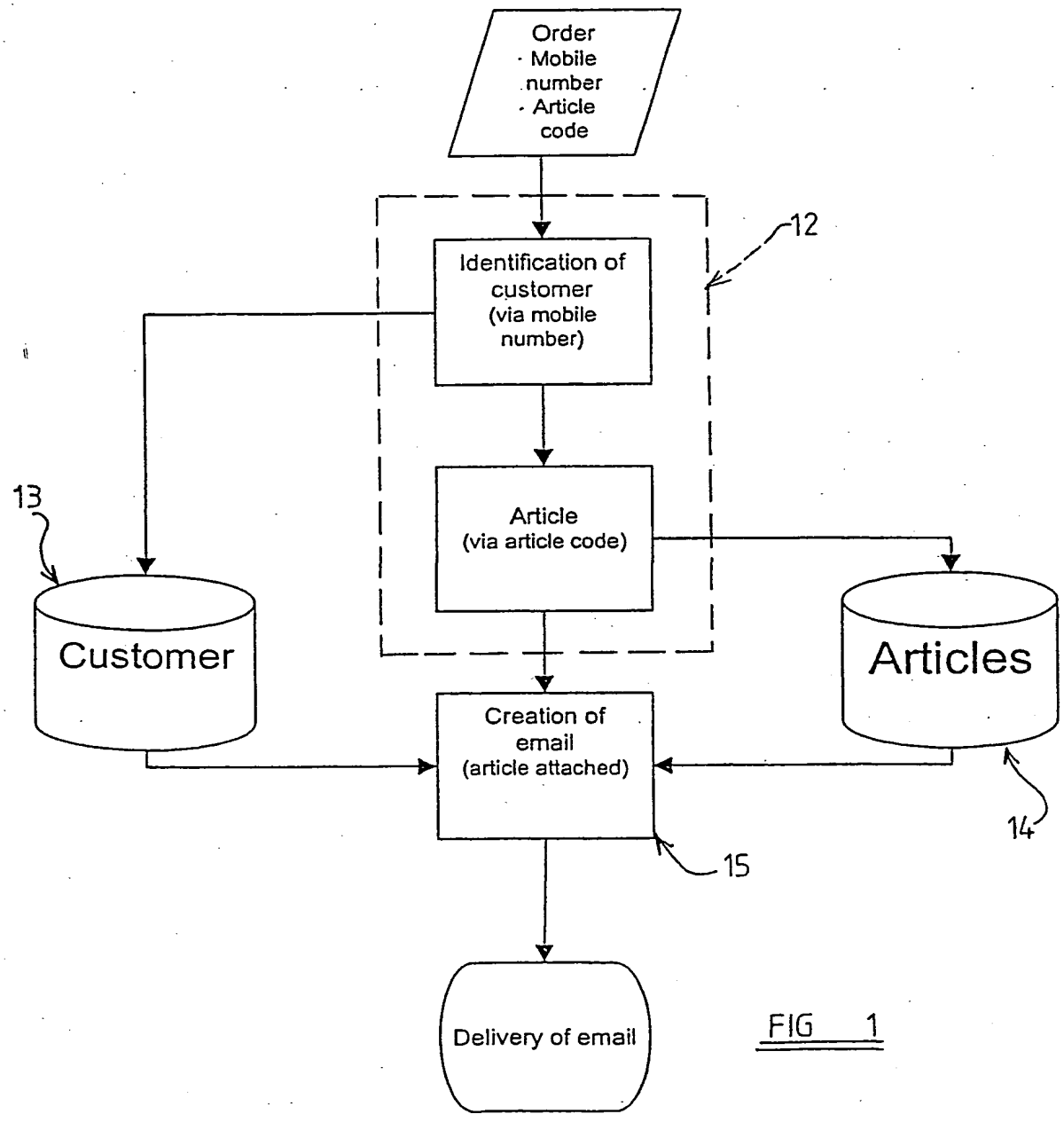


FIG 1

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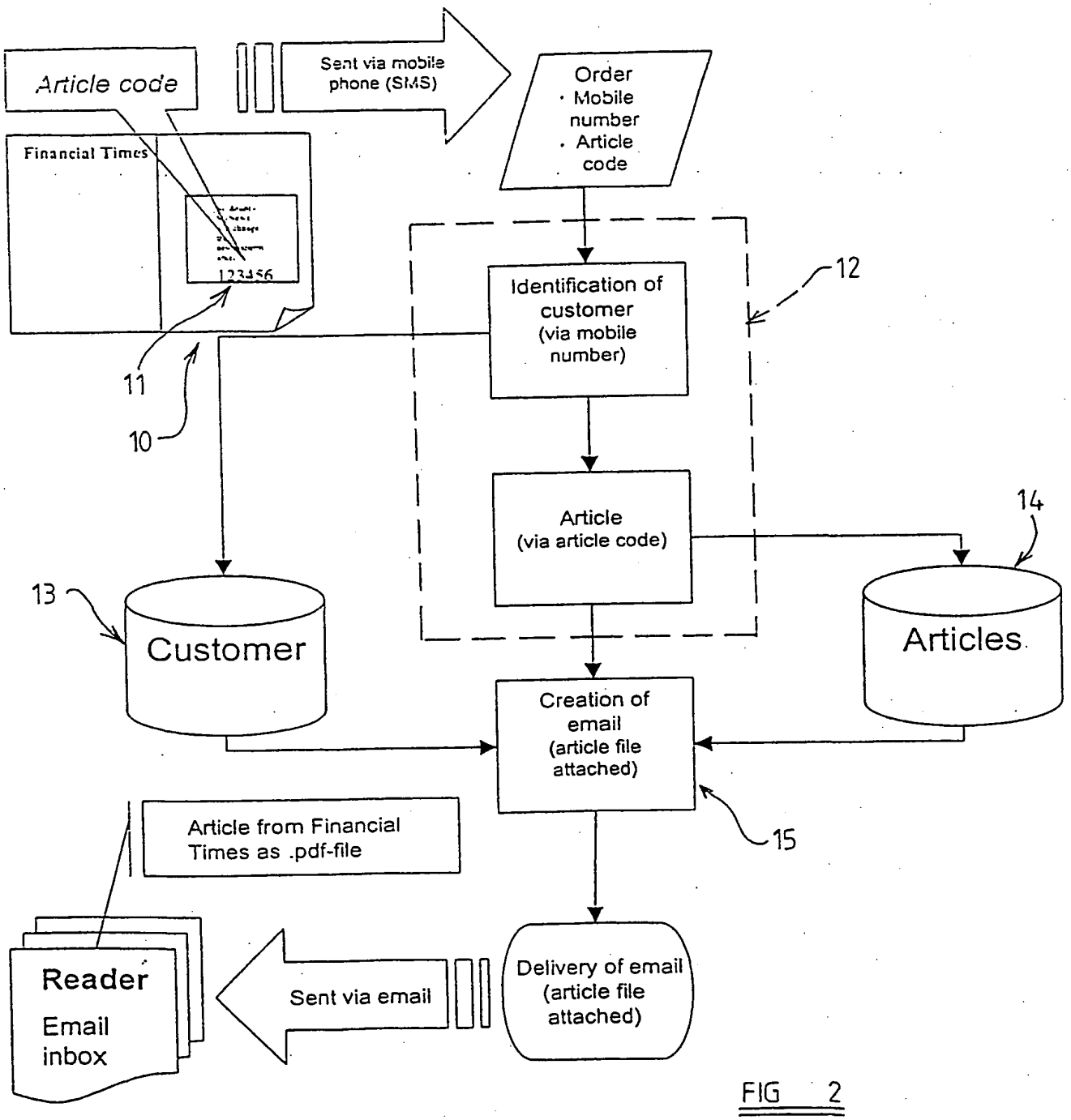
Article code
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· Mobile number
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Financial Times
123456
11
10
Identification of customer (via mobile number)
12
Article (via article code)
14
13
Customer
Articles
Creation of email (article file attached)
15
Article from Financial Times as .pdf-file
Reader
Email inbox
Sent via email
Delivery of email (article file attached)

FIG 2

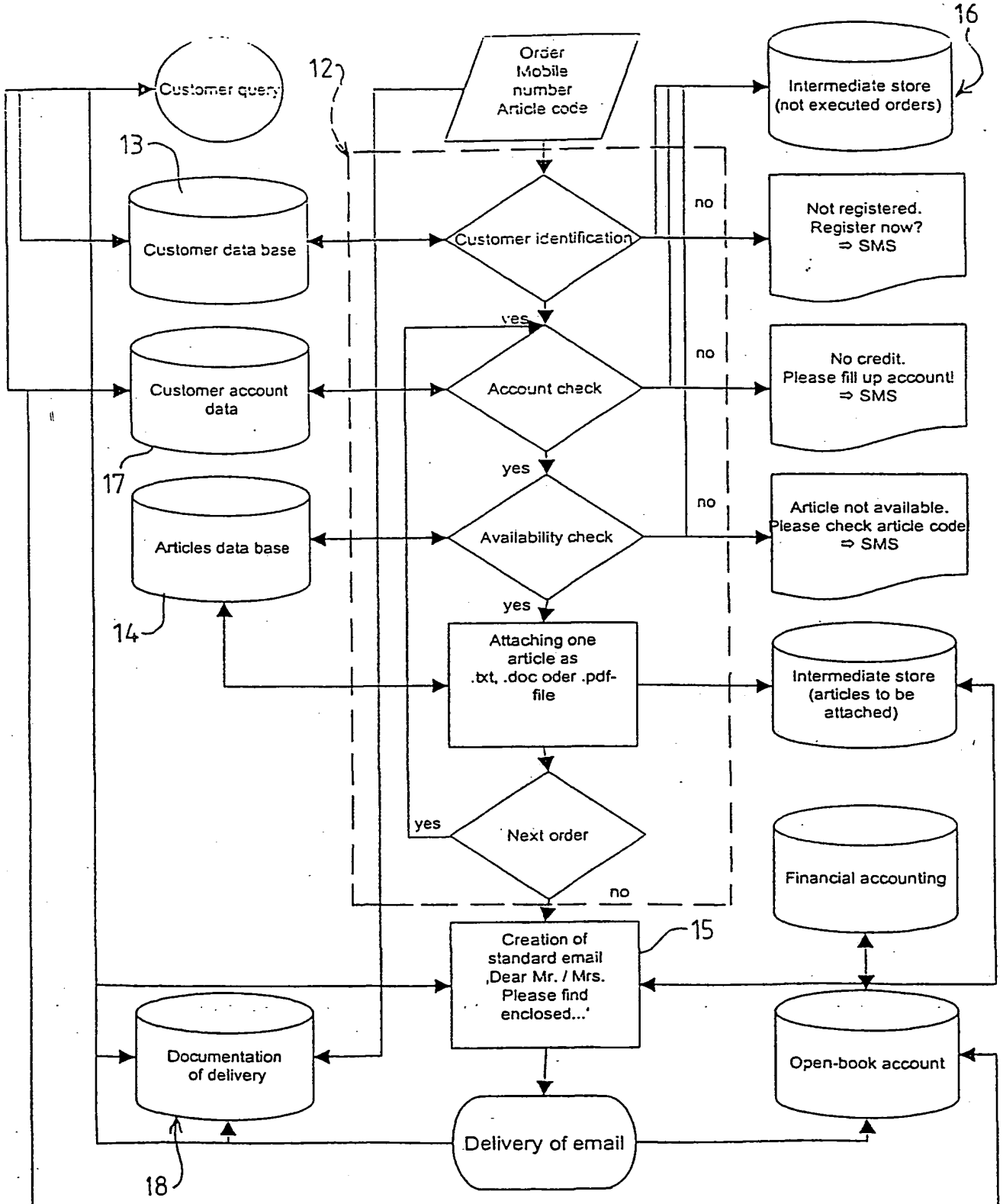

FIG 3

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
18 April 2002 (18.04.2002)

PCT

(10) International Publication Number
WO 02/031691 A3

(51) International Patent Classification[7]: G06F 17/30

(21) International Application Number: PCT/GB01/04541

(22) International Filing Date: 12 October 2001 (12.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0024976.3 12 October 2000 (12.10.2000) GB

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(74) Agent: **FORRESTER KETLEY & CO**; Chamberlain House, Paradise Place, Birmingham B3 3HP (GB).

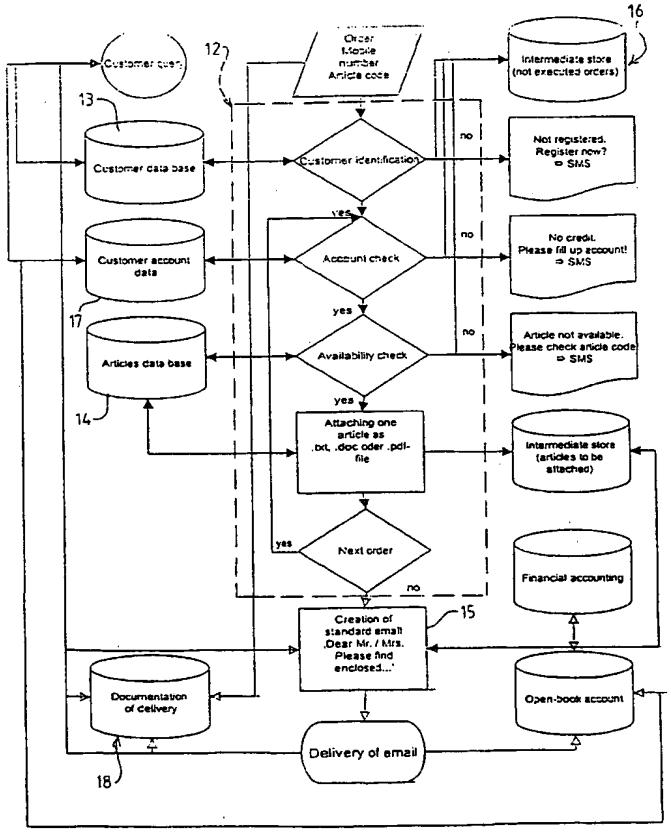
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: A METHOD OF OBTAINING INFORMATION FROM AN ELECTRONIC INFORMATION DATABASE



(57) Abstract: A method of obtaining information from an electronic information database, comprising: a) generating, in an input device, an information request, the information request including an information specifier to specify the requested information and a source identifier to identify the source of the request, b) sending the request from the input device to a request processor, c) processing the request using the request processor, d) said processing comprising using the information specifier to extract the requested information from the electronic information database and using the source identifier to determine a delivery destination for the requested information, e) generating a response, the response including the requested information, and f) sending the response to the delivery destination such that the requested information is delivered thereto; characterised in that g) the input device is a mobile telecommunications device.

WO 02/031691 A3

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
16 October 2003

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INTERNATIONAL SEARCH REPORT

Interna l Application No
PCT/GB 01/04541

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G06F17/30

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G06F H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, INSPEC, IBM-TDB, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 995 976 A (CASE T SCOTT ET AL) 30 November 1999 (1999-11-30) column 3, line 40 -column 5, line 37 column 6, line 5 -column 12, line 22 ---	1,21,24, 27,30,37
Y	METTER M ET AL: "WAP enabling existing HTML applications" USER INTERFACE CONFERENCE, 2000. AUIC 2000. FIRST AUSTRALASIAN CANBERRA, ACT, AUSTRALIA 31 JAN.-3 FEB. 2000, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 31 January 2000 (2000-01-31), pages 49-57, XP010371196 ISBN: 0-7695-0515-5 page 49, column 1 -page 57, column 1 --- -/--	1,21,24, 27,30,37

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
20 August 2003	28/08/2003

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Bowler, A

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.
A	WO 99 48250 A (HIGGINSON DAVID CHARLES ;NEL PIERRE HERCULES (ZA); HIGGINSON MARTI) 23 September 1999 (1999-09-23) page 1, line 1 -page 7, line 27	1,21,24, 27,30,37
A	JARNO K: "System specification of wireless multimedia engines: a data fusion approach" REAL-TIME COMPUTING SYSTEMS AND APPLICATIONS, 1999. RTCSA '99. SIXTH INTERNATIONAL CONFERENCE ON HONG KONG, CHINA 13-15 DEC. 1999, LOS ALAMITOS, CA, USA,IEEE COMPUT. SOC, US, 13 December 1999 (1999-12-13), pages 458-465, XP010365389 ISBN: 0-7695-0306-3 page 458 -page 465	1,21,24, 27,30,37

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Interna Application No
PCT/GB 01/04541

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US 5995976	A	30-11-1999	US	2003037067 A1	20-02-2003
			US	6449616 B1	10-09-2002
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			CN	1293849 T	02-05-2001
			EP	1062769 A1	27-12-2000
			WO	9948250 A1	23-09-1999

Form PCT/ISA/210 (patent family annex) (July 1992)